APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,772	09/26/2003	Young-Hun Choi	1293.1856	4334

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EXAMINER
WALSH, DANIEL I

ART UNIT	PAPER NUMBER
2876	

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

Office Action Summary	Application No.	Applicant(s)
	10/670,772	CHOI, YOUNG-HUN
	Examiner	Art Unit
	Daniel I Walsh	2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-21* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) *18-23* is/are allowed.

6) ☒ Claim(s) *1-17 and 24-31* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☒ All   b) ☐ Some * c) ☐ None of:

   1. ☒ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____ .

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

1.   Claims 1-6 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bilicih et al. (US 5,877,483) in view of Huang et al. (US 2003/0126483).

Re claim 1, Bilicih et al. teaches a card (20) containing personal information (col 3, lines

30+), a computer system (interpreted to include a display unit) that reads the personal

information from the card and determines whether the computer system (including display) will

be turned on/off (col 4, lines 10+).

Though Bilicih et al. is silent to the card includes a smart card, the Examiner notes that

replacing the magnetic stripe card, with a smart card, is an obvious expedient, and well within

the skill in the art. Smart cards are well known to have enhanced storage capacity and security,

for example. Further, though Bilicih et al. is silent to an actual display unit reading the card, the

Examiner notes that it is well known and conventional that displays/monitors are part of

computer/display systems. Accordingly, forming in one piece an article/system that has

formerly been formed in pieces and put together involves only routine skill in the art. As a

power control means for powering a computer system (including a display) has been taught

above, it interpreted as functionally equivalent, and well within the skill in the art.

Huang et al. teaches a smart card used to power up a computer system (FIG. 1).

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Bilicih et al. with those of Huang et al.

One would have been motivated to do this to have an access system that is more technologically advanced, therefore being able to be more secure, store more data on the cards, etc.

Re claim 2, the Examiner notes it is well known and conventional to have a display microcomputer and smart card controller, in order to interface between devices of a computer system, as is well known and conventional in the art. The Examiner notes that controllers and microcomputers/processors are well known electronics, and their implementation produces expected results, and therefore is obvious. Additionally, the Examiner points to Huang et al., and controller 16 and display microcomputer (broadly interpreted as state machine 21).

Re claim 3, the Examiner notes that ISO-7816 standards specify the contact/terminals of smart cards. Accordingly, it is well known that they include contacts for clock signals and reset signals, sent to/from their appropriate terminals, typically from a controller/processor.

Re claim 4-6, the limitations have been discussed above re claims 1-3. It is understood that an interface is provided and a signal is detected. Further, it is well known that computer systems include controllers/processors, which control the systems operation, as discussed above. Such means are well known to produce expected results, and are therefore obvious.

Re claim 7, Bilicih et al. is silent to registering personal identification information that is stored in the smart card, or deleting such information. However, the Examiner notes that it is well known and conventional in computer programming/science that when information is read

from a card and is compared to information stored in system, that the data read from the card is

stored on the system, either in a buffer memory or to a variable, and then a comparison is done

form the buffer/variable (efficiency is increased). As such practice is well know and

conventional, it meets the limitations of registering personal information in the smart card.

Additionally, in an alternative interpretation, the Examiner notes that it is well known and

conventional to delete records, for example when users leave a bank or leave a system and their

accounts are to be deactivated. Such deletion is typically performed by an authorized

administrator/user of a system, with enhanced privileges/access, and when done locally is done

through the controller/processor of the system (see Huang et al. paragraph [0024] where it is

taught that information is registered in the bios prior to login, which is interpreted as storing

information (registers information). Accordingly, it is understood that such information can be

deleted as well. Such modification is obvious to provide accurate records for user authentication.

Re claims 8-9, the Examiner notes that it is well known and conventional to store smart

card data from a card when comparing it to data on the system as discussed above.

Re claim 10, Bilicih et al. teaches turning off the system (including display) (Step 314).

Re claim 11, the limitations have been discussed above. The examiner notes that the

display is turned off when the smart card is not inserted into the monitor after a predetermined

time (immediately; step 312, FIG. 2, FIG. 3 Bilicih et al.). Further, the Examiner notes that

Bilicih et al. teaches waiting predetermined amounts of time before logging a user off a system,

and therefore it would be obvious to give more/less time to the user to insert their card, before

powering down, as a convenience, while still providing security (by shutting down after the

time). Such modification is well within the skill in the art.

Re claim 12, though Bilicih et al./Huang et al. is silent to passive smart cards, the Examiner notes that passive smart cards (those requiring powering from an external source) are well known and conventional. One would be motivated to use passive smart cards for many reasons, including form factor constraints, longevity, reduction of parts/costs, etc. It is obvious to supply power to the card prior to reading the information, in order to be able to read the information.

Re claim 13, the limitations have been discussed above, where the card information is compared to stored information to see if a match/authorization is present (step 204/206 Bilicih et al., and Huang et al., as mentioned above).

Re claim 14, reading of personal identification information from the card has been discussed above (see claim 7-9). It has been discussed above that information in the computer system is used to authenticate the personal information (validate the user). The Examiner notes that storing information in a system to validate a user (authentication) is well known and conventional for users registered in a system, so that they can be authorized to use access restricted systems via cards. Also, as presented above re claims 8-9, the Examiner notes that it is well known and conventional to store information in the storage unit for authentication (according to well known practices in computer programming/science) in order to conduct an efficient comparison between data to authenticate a user by storing card information to a variable/memory of the system in order to complete a computer comparison.

Re claims 15 and 17, though the prior art is silent to deleting information from the storage unit, it is well known and conventional that user accounts/cards/information can be deleted from a system by an authorized person/user/system administrator. It would be obvious to

delete information in order to keep systems up to date. Further, the Examiner notes, as discussed

re claim 9, that storing card data to carry out a comparison, includes storing data on the system

(whether a buffer or temporary variable) in order to complete a comparison process. Such

storing means are well known in computer science programming, and therefore well within the

skill in the art, and include deleting data after the comparison is complete.

Re claim 16, the limitations have been discussed above re claims 7-9.

Re claims 24, the limitations have been discussed above. Bilicih et al./Huang et al. teach

a detector circuit detecting the smart card (interface 12 Huang et al.). Though silent to a passive

card (power provided by a circuit to the smart card), the Examiner notes that it is well known and

conventional to have passive/active smart cards. One of ordinary skill in the art would be

motivated to use passive smart cards, for reasons that include reduction of parts, longevity of the

card, reduction of card costs, etc., as discussed above. With regard to a smart card controller

providing signals to/from the smart card through terminals, it is well known and conventional to

do so, especially in light of ISO-7816 standards. The Examiner notes (as discussed above re

claim 8), that in verifying/registering a user to log in, personal information (access information)

is stored in a storage unit, when a comparison between data on a card and stored data is made

(such as storing the card information in a buffer or variable in order to complete the comparison).

Finally, the Examiner broadly interprets the state machine 21 (Huang et al.) to include a monitor

microcomputer that receives an insertion signal (signal indicating a valid card has been inserted,

in order to power up the system).

Re claim 25, the limitations have been discussed above re claim 6.

Re claim 26, the limitations have been discussed above re claim 11.

Re claims 27-31, the limitations have been discussed above re claims 14-15.

Allowable Subject Matter

2.   Claims 18-23 are allowed.

3.   The following is an examiner's statement of reasons for allowance:

Re claims 18-21, the prior art is silent to a monitor connected to a system, comprising a

controller implementing an on screen display region, displaying registration and deletion buttons

of the personal identification information and an authentication result from checking the personal

identification information, and turning the display of the monitor on or off based on the

authentication result, when the detector determines insertion of the card.

Re claims 22-23, the prior art is silent to deleting the information in the storage unit if the

information is the same as the read information from the card, and registering stored information

by reading information form the smart card and storing the information prior to registering.

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Conclusion

4.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure: Choi (US 2004/0129776), Sakamoto et al. (US 2004/0104805), Leivo et al. (US

2003/0128822), Kato et al. (US 5,956,557), Davis et al. (US 2004/0060983), Satoh et al. (US

2003/0055686), Davis et al. (US 2001/0035455), Takeuchi et al. (US 2003/0151600), Wheeler et

al. (US 2003/0014372), Wheeler et al. (US 2002/0016913), Murase (US 2002/0013769),

Rehwald (2004/0139044), Broussard et al. (US 2004/0138921), Bouknight (US 2004/0117308),

Wheeler et al. (US 2004/0005051), Park (US 2003/0200445), Challener et al. (US

2003/0135727), Kuo et al (US 2003/0088780), Hoberock et al. (US 2003/0074575), Ofir (US

2002/0178366), Du et al. (US 2002/0029348), Tan et al. (US 2001/0045451), Grawrock et al.

(US 2001/0002487), Nakano (US 6,575,373), White et al. (US 5,410,713), Benton et al. (US

4,901,068), Bouthillier et al. (US 6,012,632), Guez et al. (US 2004/0134992), Wang (US

6,128,744), Hung-yi (US 2003/0191960), McCaughan et al. (US 6,173,282), Boyles et al. (US

6,738,901), Tanikawa et al. (US 2003/0051040), Leih et al. (US 5,969,630), Wakai et al. (US

2002/0091586), Chung (US 2001/0034623), Stefik et al. (US 5,534,975), Yu et al. (US

6,067,621), Mooney et al. (US 5,327,497), Lee et al. (US 2003/0121972), King (US

2002/0020752), Bito (US 4,684,791), Pitroda et al. (US 6,705,520)and Sato et al. (US
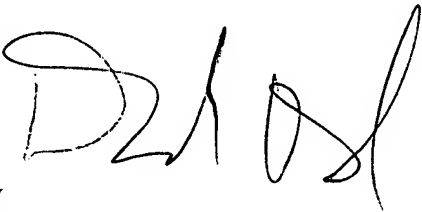
5,286,954).

5.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Daniel Walsh whose telephone number is (571) 272-2409. The

examiner can normally be reached between the hours of 7:30am to 4:00pm Monday through

Friday.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone numbers for this

Group is (703) 308-7722, (703) 308-7724, or (703) 308-7382.

Communications via Internet e-mail regarding this application, other than those under 35

US.C. 132 or which otherwise require a signature, may be used by the applicant and should be

addressed to **[daniel.walsh@uspto.gov]**.

> All Internet e-mail communications will be made of record in the application file. PTO
> employees do not engage in Internet communications where there exists a possibility that
> sensitive information could be identified or exchanged unless the record includes a properly
> signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more
> clearly set for the in the Interim Internet Usage Policy published in the Official Gazette of the
> Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should

be directed to the Group receptionist whose telephone number is (703) 308-0956.

DW
8/2/04

KARL D. FRECHER
PRIMARY EXAMINER